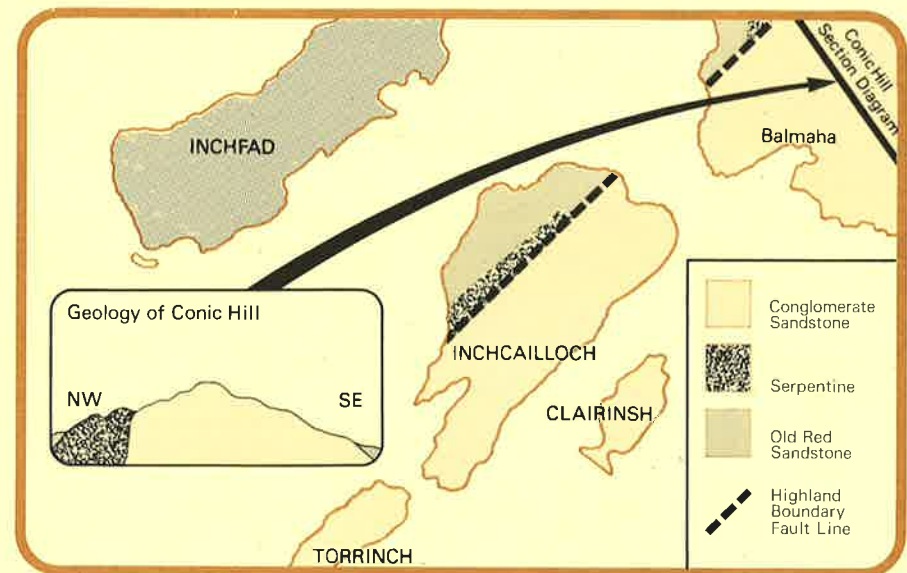
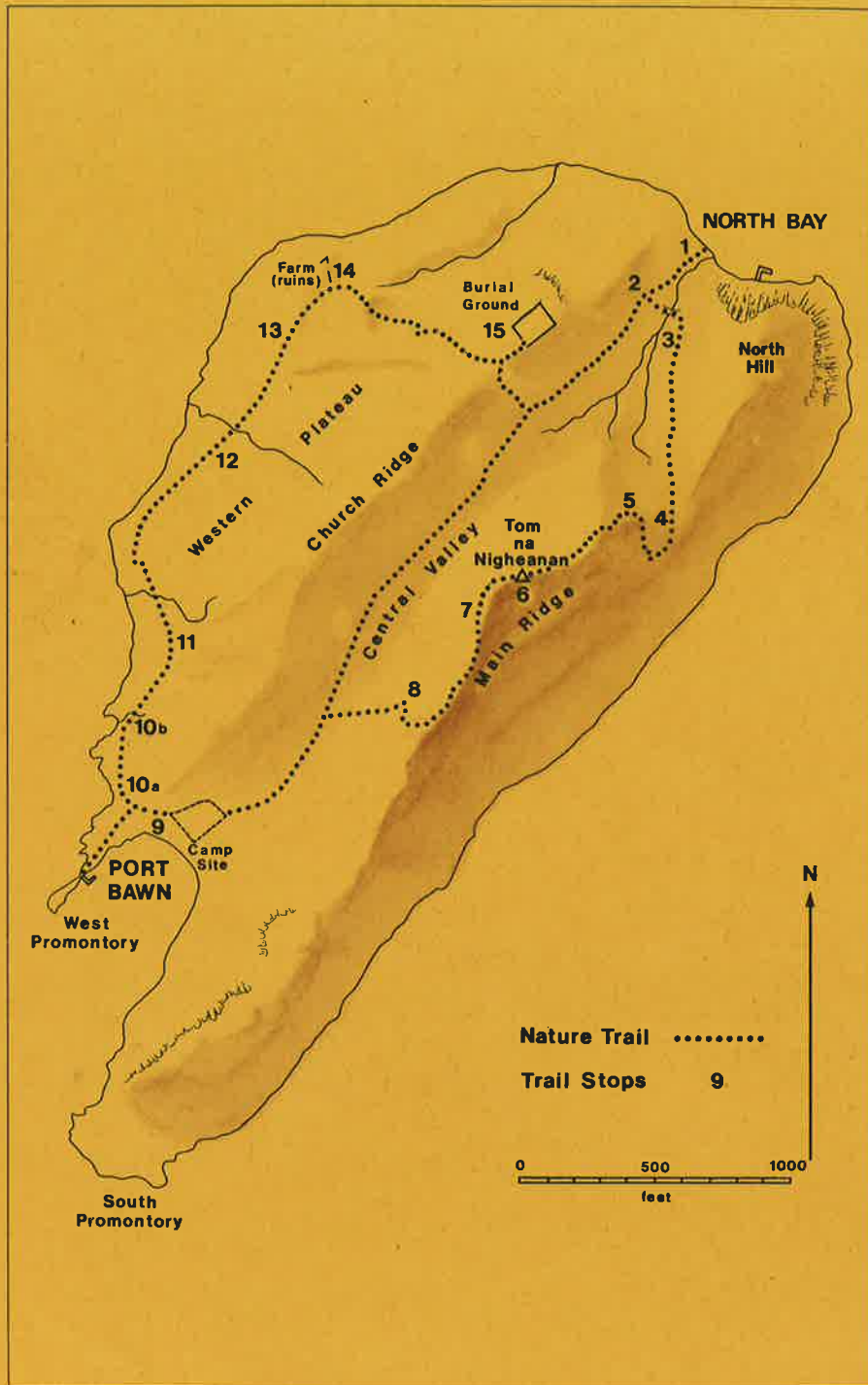


WELCOME TO INCHCAILLOCH NATURE TRAIL

The two most significant features of Inchcailloch are its rock formations and woodland. In addition, the signs of centuries of human activity and land practice can still be recognised despite the fact that it is 200 years since people lived here. The island as it is today is thus a lesson in the historical relationships of man and his environment in this part of Scotland. Inchcailloch is now owned by the Nature Conservancy Council and is part of the Loch Lomond National Nature Reserve, which consists of five islands and part of the nearby mainland.

The nature trail follows two and a half miles of woodland paths, starting and finishing at North Bay. The fifteen numbered stopping points are shown on the map on the opposite page. The walk can be shortened by omitting Stops 10-14 and returning from Port Bawn (Stop 9) along the Central Valley path, with the choice of a short detour to the Burial Ground (Stop 15) just before reaching North Bay. Parts of the trail are steep, particularly Stops 4-8, and care is needed, especially in wet weather.



Please

- keep to the footpaths,
- take your litter home,
- avoid all risks of fire,
- do not pick flowers: leave them for others to see and enjoy.

The trail begins seventy yards along the shore from North Bay jetty. Follow the pathway sign for Stop 1.

1 CONIC VIEW

Before beginning your island walk, look back to the mainland and up to the summit of Conic Hill (1,175 ft). The hill and ridge leading down to the disused steamer pier are formed of steeply inclined layers of rock called Conglomerate Sandstone. Above the white house a separate ridge leads down towards the loch-side and is formed of a lava-like rock called Serpentine (see diagram on page 1). These two ridges of rock are closely associated with a line which runs right across Scotland, from Stonehaven on the north-east coast to Kintyre in the south-west. This line, known as the Highland Boundary Fault, is the result of major rock movements in the past and now divides the Lowlands to the south from the Highlands to the north.

All these geological features can be seen and examined on Inchcailloch (Stops 4, 10a and b) which also lies on the line of the fault. The different underlying rocks, and the soils produced from them directly influence the vegetation cover on the island.

Follow the steep woodland path immediately in front of you to Stop 2.

2 OAK WOODLAND

Here, in the deep soils of the Central Valley almost all of the taller trees are oaks. A great variety of insects and other small creatures feed on oak trees: this is partly because oak trees have been present in Britain for a long time and in the past have been very abundant.

Look upwards and notice how the branches of each tree reach out towards those of the next, so that by mid-summer most of the

sunlight is caught by the leaves of the upper canopy. (Because of this many of the plants on the woodland floor, for example, bluebells and primroses, flower before the growing leaves on the trees shade out the sunlight.) Nearby are smaller trees which can live in partial shade such as hazel and rowan.

Turn left away from the Central Valley Path and across the stream by the footbridge. Follow the wooden walk-way for Stop 3.

3 ALDER TREE MARSH

During the summer months, the marsh is a profusion of ferns, tufted grasses and sedges. In hollows like this, where rain water does not drain away freely, the moisture-loving alder replaces oak as the main tree. Amongst the alders are clumps of ash saplings growing close together.

Note that most of the alders have more than one stem. The trees were originally cut at ground level and several replacement shoots have been allowed to grow from each stump. This form of woodland management is known as coppicing. Being resistant to water, alder was highly valued for making wooden clogs. The wood was also a source of charcoal used in the manufacture of gunpowder.



4

ROCK FACE

Here the underlying Conglomerate Sandstone is clearly exposed. It is composed of water-worn rounded pebbles, some of them more than nine inches across, firmly embedded in sandstone. 350 million years ago these pebbles were carried by fast streams draining from the mountains to the north and were deposited in layers of sand along the southern edge of the mountain range. Eventually, after being subjected to great pressures and slow chemical change, the beds of sand and pebbles were cemented together to form an extremely hard rock. Notice how steeply inclined the rock layers are at this point and how some of the pebbles have been completely sheared during rock movement associated with the Highland Boundary Fault. Because of its resistance to wear, Conglomerate Sandstone forms the highest part of Conic Hill (see diagram on page 1) and the main ridge of the chain of islands across Loch Lomond.

The next part of the trail leading to Stop 5 is steep, and care is needed climbing the wooden steps.

5

ENDRICK VIEW

Southwards are the gentle slopes and agricultural lands of Lowland Scotland. The flat-topped hills in the distance (from left to right, the Fintry, Campsie and Kilpatrick Hills) were formed from successive layers of volcanic lavas some 250 million years ago. The knoll-shaped Duncryne Hill on the mainland behind the furthest island, is the remains of an extinct volcano.

In the foreground is the River Endrick. Each autumn salmon and sea trout swim up to its shallow headwaters to spawn. Some of the migratory fish will be caught on the way: you may see a fisherman's boat in the vicinity of the river mouth. Nearby lies the mainland portion of the reserve with its important marshes and freshwater life.

Below, off the tip of Clairinsh, is a tiny islet called the Kitchen. This is thought to be a crannog, or man-made island, built about 2,000 years ago by lake-dwellers as a place of refuge against enemies and wild animals.

The next part of the trail leads to the summit of the island. In recent years several fires have killed many of the trees in this area and bracken, our commonest fern, now flourishes in the open conditions.

Mallard drake

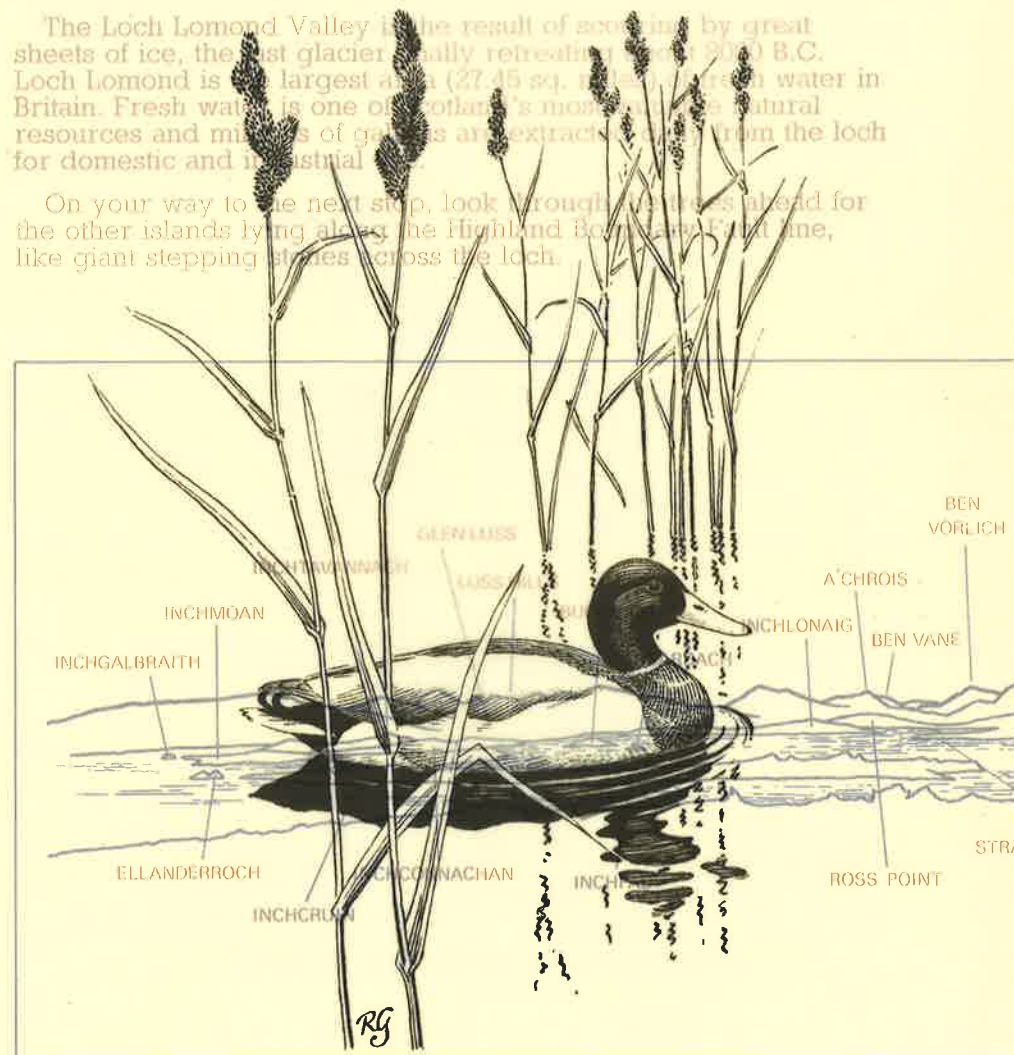
6

SUMMIT VIEWPOINT

You have now climbed about 250 feet above the level of the loch and if the day is clear there is an excellent view northwards into Highland Scotland. In contrast to Lowland Scotland, the slopes are steep and more favourable to forestry than farming. The Forestry Commission has planted many thousands of coniferous trees on the east side of the loch. These coniferous plantations are part of the Queen Elizabeth Forest Park created by the Forestry Commission in 1953.

The Loch Lomond Valley is the result of scouring by great sheets of ice, the last glacier finally retreating about 9000 B.C. Loch Lomond is the largest area (27.45 sq. miles) of fresh water in Britain. Fresh water is one of Scotland's most important natural resources and millions of gallons are extracted from the loch for domestic and industrial use.

On your way to the next stop, look through the trees ahead for the other islands lying along the Highland Boundary Fault line, like giant stepping stones across the loch.



4

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The next part of the trail leading to the summit is steep, and care is needed climbing the wooden steps.

5

ENDRICK VIEW

Southwards from the summit, the steep slopes and agricultural lands of Lowland Scotland are visible. The hills in the distance (from left to right, the Pentlands, the Eildon Hills and Kilpatrick Hills) were formed from successive flows of volcanic lavas some 20 million years ago. The known volcanic activity on the mainland behind the furthest island is the extinct volcano.

In the foreground, the River Endrick flows. In autumn salmon and sea trout come up to spawn. Some of the fish will be caught on the river. You may see a fisherman's net in the vicinity. The river flows south. Nearby lies the mainland, the important marshes and freshwater lake.

Below, off the shore, is a small island called the Kitchen. This is thought to be a crannog, or artificial island, built about 2,000 years ago by the dwellers as a place of refuge against enemies and wild animals.

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Mallard ducks

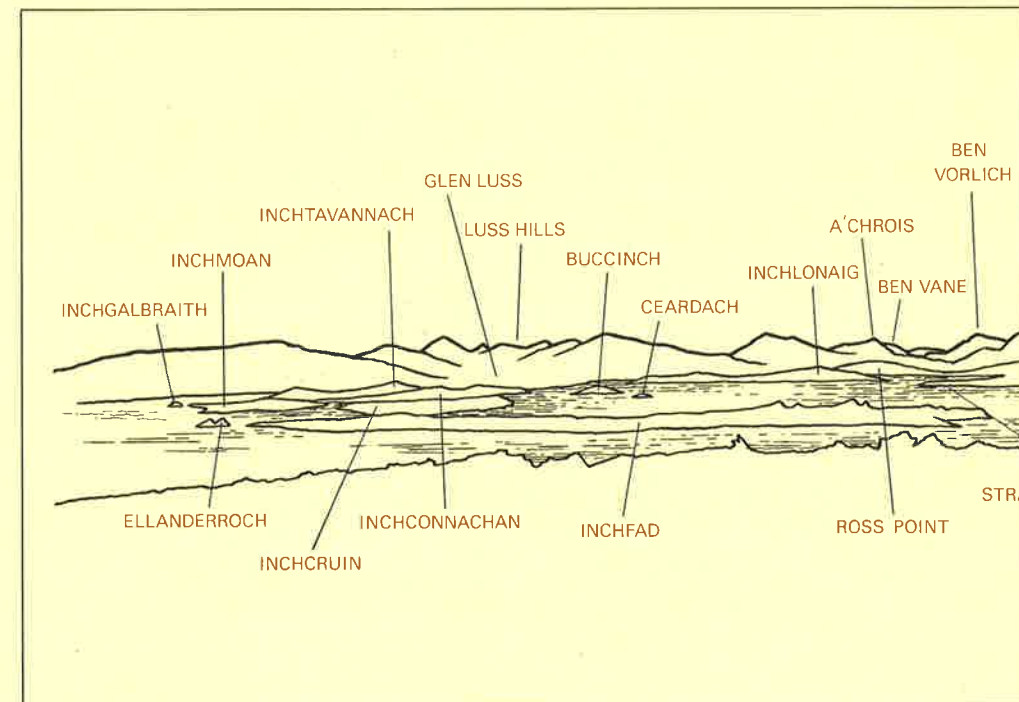
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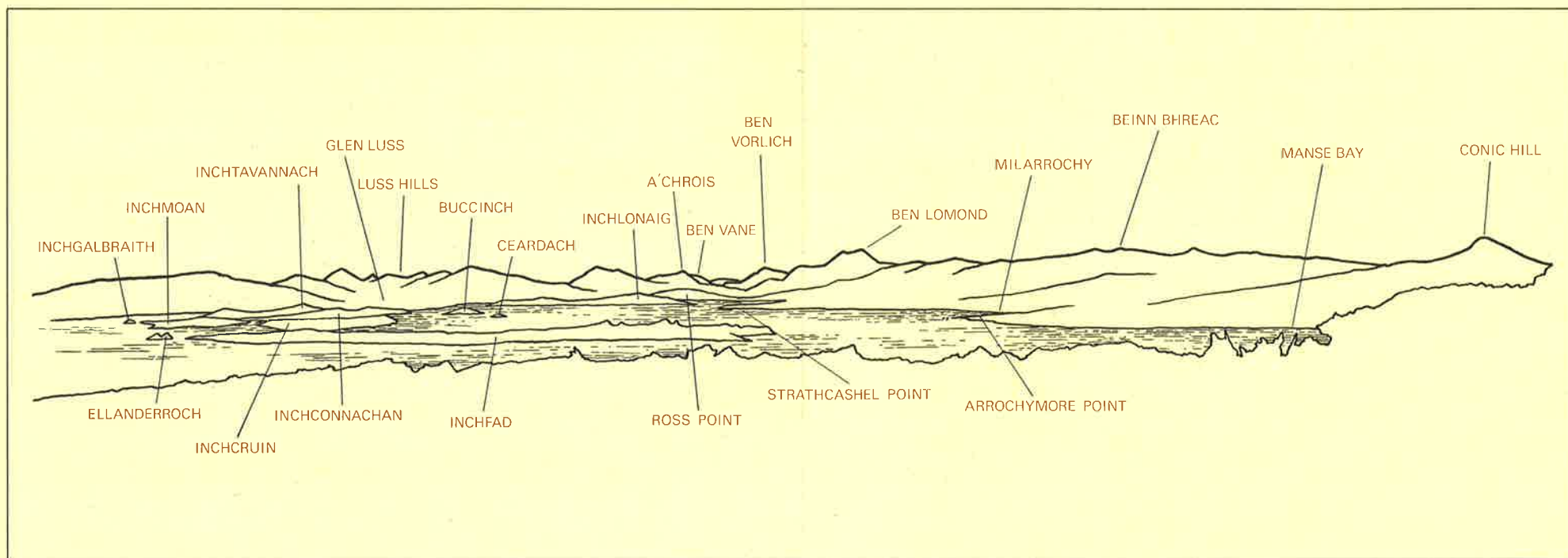
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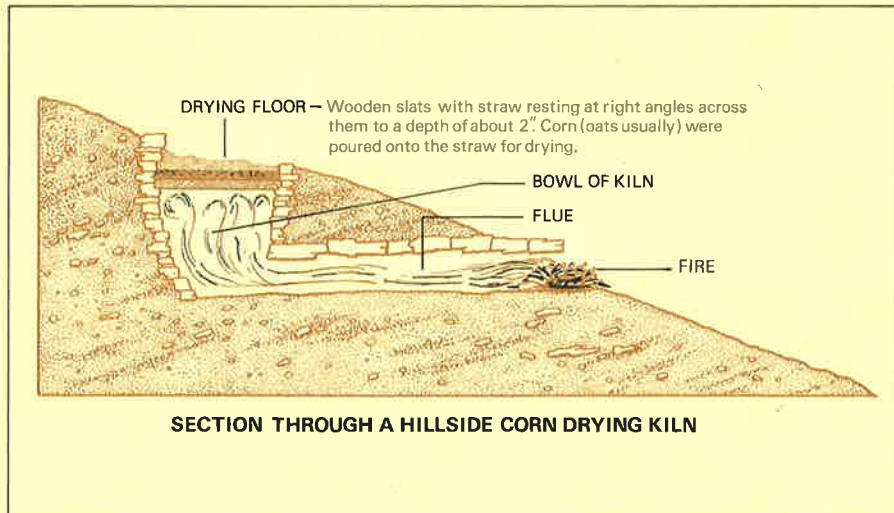


8

HILLSIDE CORN - DRYING KILN

This circle of stones is the remains of a hillside corn-drying kiln, of a type used until the late 18th Century. It was built in the shape of a tobacco pipe, and the heat from a slow burning fire was blown by the wind along the narrow flue into the base of the bowl. The grain being dried in preparation for grinding was spread on straw-covered wooden slats laid about two inches apart across the top of the bowl. Grain and other crops were grown on the more level ground, like that around Stop 13.

The trail now rejoins the Central Valley path. Turn left for Port Bawn, the next stop.



9

PORT BAWN

For many years this part of the island, with its sandy sheltered beach, has been a popular place for picnickers and campers. Regrettably, a minority of visitors have done much harm. Nearly every large tree in the area has been badly scarred and a lot of litter and broken glass has had to be cleared away. In order to maintain a higher standard, the Nature Conservancy Council has restricted the camping area and limited the number of campers (for further details about camping see inside back cover). The jetty was built in 1967, not just to make landing easier, but also to reduce the gradual wearing away of the West Promontory shore through the beaching of small boats.

You now have a choice of routes: either directly back to North Bay along the Central Valley path, with the option of a short detour to the Burial Ground (Stop 15) OR a slightly longer route along the Low Path.



10A and 10B OUTCROPS OF SERPENTINE ROCK

A

You are now standing at the very edge of the Conglomerate Sandstone region. Twenty-five yards ahead is an outcrop of a belt of Serpentine rock, which is associated with the Highland Boundary Fault throughout its length (see diagram and map on page 1). In walking the next few yards of the path you are in fact crossing the Fault from the Lowlands into the Highlands.

Stop B is another hundred yards further on.

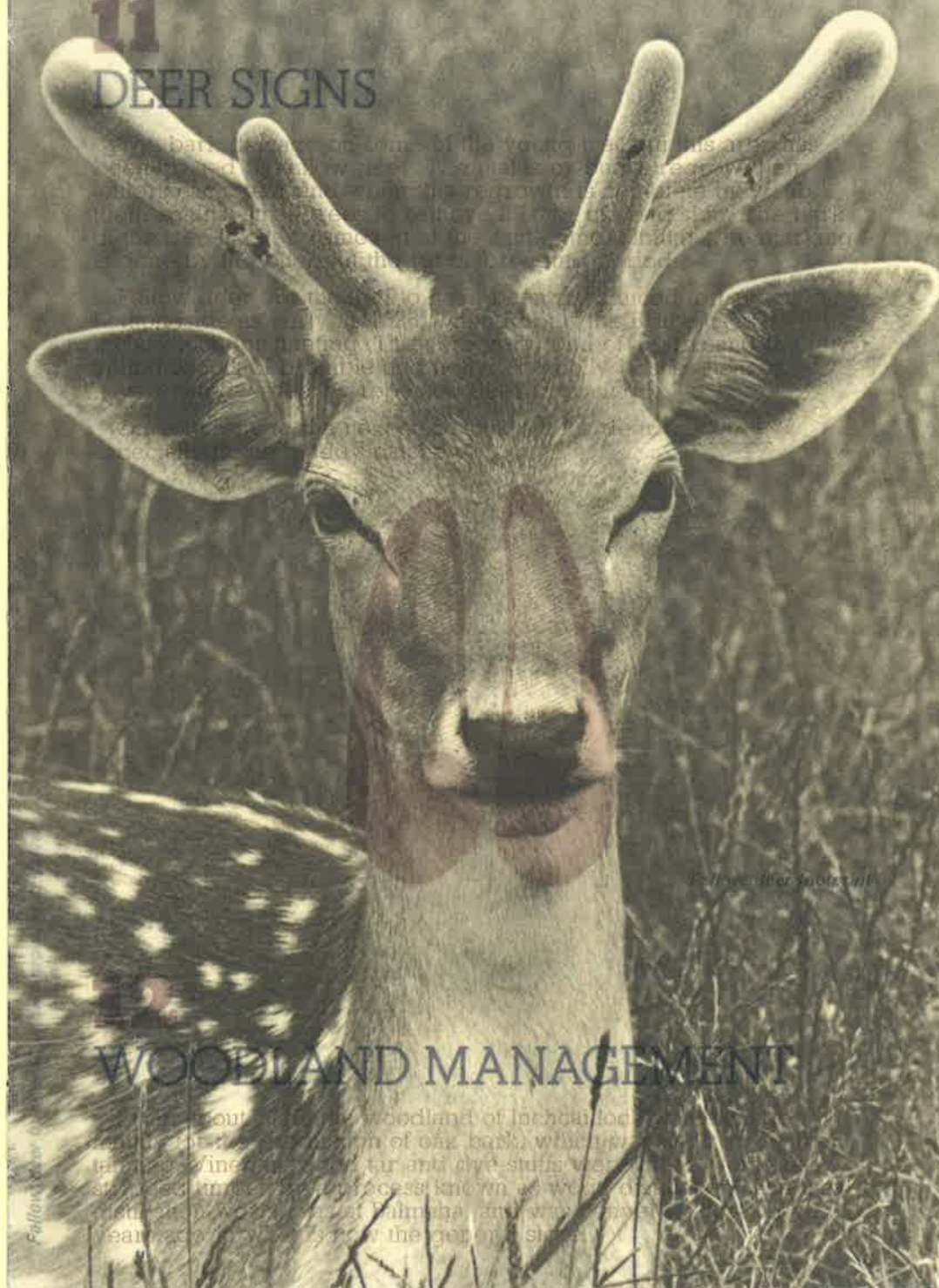
B (loop path)

Serpentine is formed from molten rock and does not contain large pebbles like the Conglomerate Sandstone seen earlier. In the absence of local limestone, it was used as a fertiliser after being burnt in a special kiln. Some of the plants found here prefer the alkaline soil this rock produces. One such plant is the fern, maidenhair spleenwort.



Maidenhair spleenwort

11 DEER SIGNS



12 WOODLAND MANAGEMENT

10A and 10B OUTCROPS OF SERPENTINE ROCK

A

B (loop path)

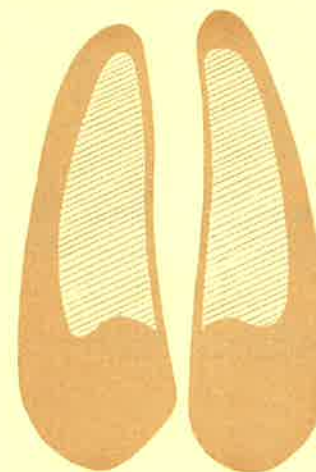
Fallow deer buck with antlers growing in velvet

11 DEER SIGNS

The bark damage on some of the young trees in this area has been caused by fallow deer. The males or bucks regrow their antlers each year and when this regrowth is complete they rub them against small trees to remove a layer of dead skin. The bark of the tree is often removed at the same time. Similar tree marking is done by the bucks at the rut or breeding period.

Fallow deer are thought to have been introduced to Loch Lomondside as early as 1326, when Robert the Bruce used Inchcailloch for hunting. They are very fond of acorns and the young shoots of bramble and holly. The holly bushes nearby have been dwarfed by repeated deer browsing.

On your way to the next stop, look out for deer tracks, especially in the muddy patches.



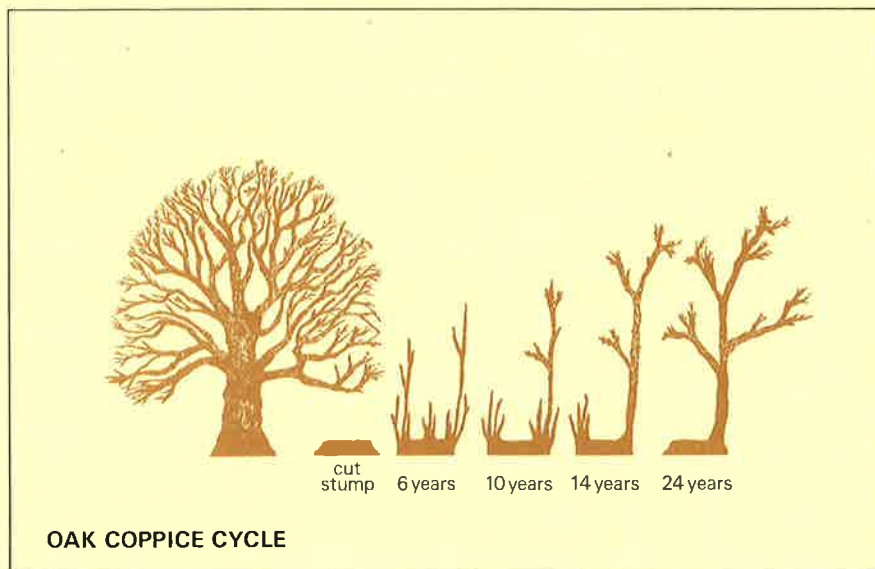
Fallow deer footprint

12 WOODLAND MANAGEMENT

From about 1770, the woodland of Inchcailloch was managed mainly for the production of oak bark, which was used for leather tanning. Vinegar, wood tar and dye-stuffs were made from the stripped timber by a process known as wood distillation. The local distillation works was at Balmaha, and was converted forty-five years ago to what is now the general store.

The management of coppiced woodland involved felling the oak trees in spring, when the sap was rising and the bark was easy to peel. Many young shoots then grew from each cut stump, and all but one were cut away or singled. The single shoot or stem was allowed to grow until it was twenty-four years old; it was then felled and the cycle began again.

By the end of the last century cheaper materials from abroad had made the industry uneconomic and so the singled young stems were left to develop into the maturing oaks we see today.



13 RIDGE AND FURROW

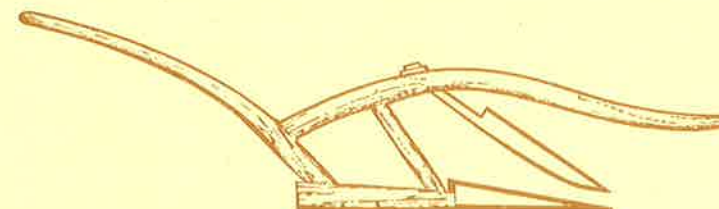
Directly below the stop sign is a shallow depression crossing the path. Walk along the path about eight paces and you will find a second depression parallel to the first. These are actually drainage or boundary furrows, dividing the once cultivated ground into separate strips. Such furrows were necessary to drain the land before the days of tiled field drains. Altogether, forty-two furrows have been traced crossing the Low Path you have just walked. The crops grown on the ridges between the furrows would have included oats and barley. The ruins of the farm can be seen at Stop 14.

On the right of the trail, just before the next stop, you will see that some of the trees have numbers and double white lines painted on their trunks. The white lines mark the position where the girth of the tree is periodically measured to learn how fast it grows. This is part of an oak tree study being carried out by scientists on seven National Nature Reserves in Britain.

14 SITE OF INCHCAILLOCH FARM

Between this stop and the loch shore are the ruins of several buildings which are all that remains of Inchcailloch Farm. The lease or tack of the farm was not renewed after 1770 and the arable and pasture land was planted with oak trees. About the time of the First World War, the nearest and most obvious ruin was partly re-built to stable horses, which were used to haul felled timber down to the water's edge.

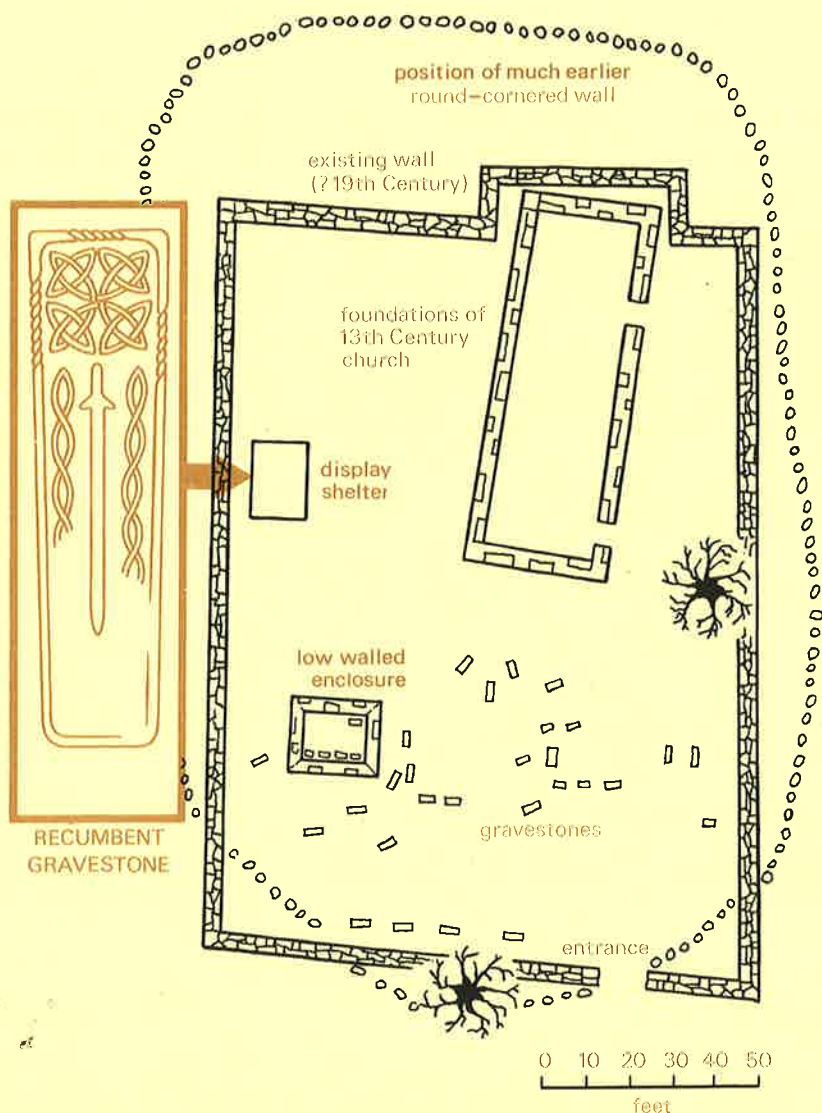
Look around you for the older oaks with their massive trunks and wide-spreading branches. In the woodland management system, these selected trees were left to grow both as a source of seed and heavy timber.



Old Scots plough

15 BURIAL GROUND

You are standing in what used to be Buchanan Parish burial ground, containing the foundations of an early 13th Century church. The church was dedicated to St Kentigerna, a Christian missionary who was buried on the Island about 733. Until the 17th Century, Buchanan Parish was named Inchcailloch or Inchcailleach (which means island of the cowled or old woman). Up to 1621, when the church ceased to be used, the parishioners had to row across to the island for Sunday worship. Recumbent gravestones and carved masonry from the church can be seen in the display shelter.



PLAN OF INCHCAILLOCH BURIAL GROUND

This site has been scheduled as an Ancient Monument. Please do not touch the gravestones or walk on the church foundations.

This is the last stop on the trail. Leave by the way you entered and turn left down to the Central Valley; turn left again for North Bay, your starting point.

The great expanses of broad-leaved woodland that once covered Britain have now vanished. Only fragments remain. The wooded slopes of Loch Lomondside and its islands are internationally famous, yet even here this woodland has largely been replaced by more profitable coniferous trees. The introduction of fallow deer for hunting, coppicing for the leather tanning and wood distillation industries, even the thoughtless visitor, have all left their mark on the oakwood of Inchcailloch. Nevertheless these woods still represent some of the best semi-natural broad-leaved woodland to be found in Scotland today. The Nature Conservancy Council's primary object on Inchcailloch, and on other islands in the reserve, is the conservation of this forest remnant with its rich variety of woodland plants and animals.

The Nature Conservancy Council Regional Office for South West Scotland is at The Castle, Loch Lomond Park, Balloch, Dunbartonshire, G83 8LX.

SCHOOL PARTIES AND ORGANISED GROUPS

Prior permission is required for schools and other organised bodies intending to visit Inchcailloch. A written application should be made well in advance to the Regional Office giving date(s), approximate number of people and the purpose of the visit.

CAMPING

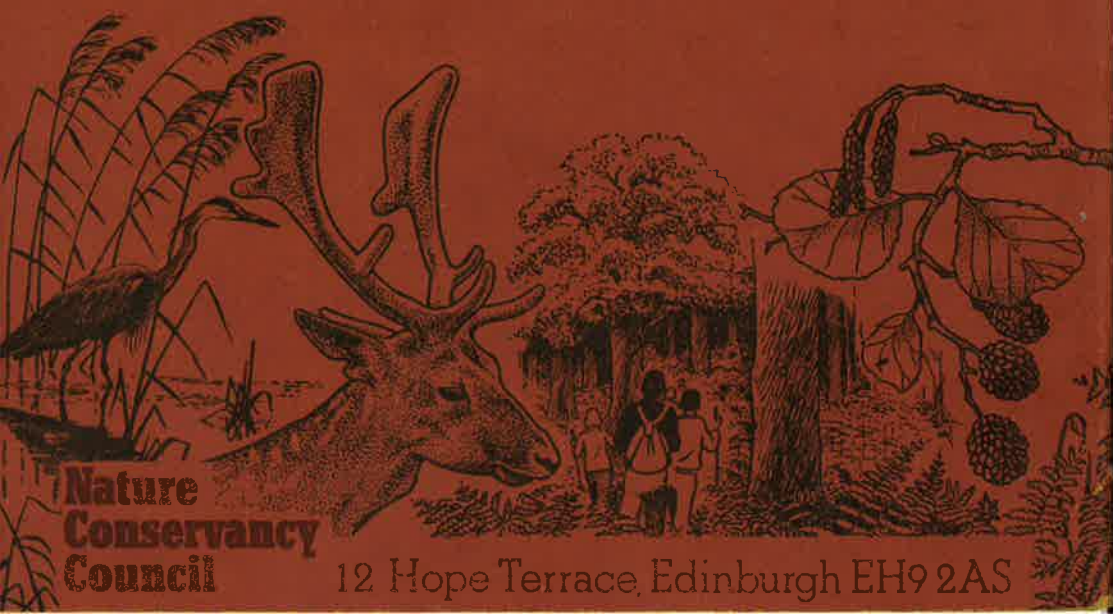
Camping on the reserve is only allowed at Port Bawn, Inchcailloch, and even there prior permission must be obtained. A written application should be made well in advance to the Regional Office giving specific dates, number of people and tents. A charge is made for camping and the number of persons camping at Port Bawn is limited to twenty-four per night.

The Nature Conservancy Council is the government body which promotes a national policy for nature conservation. To this end it selects, establishes and manages a series of National Nature Reserves and gives advice about nature conservation. All this work is based on detailed ecological research and survey.

The Scottish headquarters of the Nature Conservancy Council are at 12 Hope Terrace, Edinburgh, EH9 2AS.

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